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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/538,754	03/30/2000	Michael Alexandrovich	Alexandrovich 1-12-9	8954

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EXAMINER

LEE, HWA S

ART UNIT PAPER NUMBER

2877

DATE MAILED: 07/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/538,754

**Applicant(s)**

ALEXANDROVICH ET AL.

**Examiner**

Andrew Hwa S. Lee

**Art Unit**

2877

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

Claims 1, 7, and 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With regards to claim 1, the direction or relationship of the term “sloping” in relation to other element is not defined such that it is clear. Is it sloped relative to the surfaces or to the incident light? Also it is unclear how edges can face each other when edges don’t have “faces.” in regards to claims 1 and 13

With regards to claim 7, it is indefinite if a spacer or air is between the plates, or if the spacer is air.

With regards the “planar step” of claim 13, it is unclear how a step is “planar” when a “step” is generally understood to have an angle or two different planes. “Partly semi-reflecting surfaces” is unclear how something is partly semi-reflecting. It would appear that a fully reflective material is partly semi-reflecting.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Art Unit: 2877

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1, 2, 5, 6, 13-15 rejected under 35 U.S.C. 102(e) as being anticipated by Rinaudo et al (US 6,323,987).

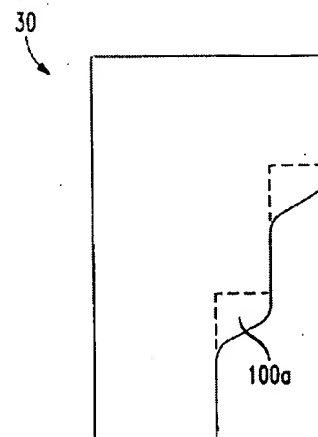
Rinaudo et al ("Rinaudo" hereinafter) show a controlled multi-wavelength etalon comprising:

a first planar reflecting surface;

a second planar reflecting surface positioned parallel to and at a first distance from the first planar reflecting surface;

a third planar reflecting surface positioned parallel to and at a second distance from the first planar reflecting surface, the second distance being greater than the first distance, the second planar reflecting surface having a first edge and the third planar reflecting surface having a second edge, the first and second edges facing one another; and

*FIG. 3C*



Art Unit: 2877

a step having a sloping planar surface adjoining the first and second edges.

With regards to claim 2, the step is positioned such that a portion of a light passing through the first planar reflecting surface impinges on the sloping planar surface at an angle such that it passes through the sloping planar surface.

With regards to claims 5, 6, 14, and 15, the surfaces are formed on glass or silicon.

Claims 1-3, 5, 6, and 13-16 are rejected under 35 U.S.C. 102(e) as being anticipated by O'Brien (US 6,500,512).

O'Brien shows a stepped etalon comprising:

a first planar reflecting surface;

a second planar reflecting surface positioned parallel to and at a first distance from the first planar reflecting surface;

a third planar reflecting surface positioned parallel to and at a second distance from the first planar reflecting surface, the second distance being greater than the first distance, the second planar reflecting surface having a first edge and the third planar reflecting surface having a second edge, the first and second edges facing one another; and

a step having a sloping planar surface adjoining the first and second edges.

Art Unit: 2877

With regards to claim 2, the step is positioned such that a portion of a light passing through the first planar reflecting surface impinges on the sloping planar surface at an angle such that it passes through the sloping planar surface.

With regards to claim 3, the angle is the Brewster angle.

With regards to claims 5 and 6, the surfaces are formed on glass or silicon.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4, 7-12, and 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over O'Brien as applied in claims 1 and 13 above, further in view of Rinaudo.

With regards to claims 4 and 17, although O'Brien does not show an example of an etalon having the dimensions of claim 4, O'Brien shows that the dimensions should be selected considering the refractive index of the etalon, the wavelength of interest, and considering the Brewster angle. Therefore, one of ordinary skill in the art at the time of the invention would have constructed an etalon of the claimed dimensions in order to have an etalon function as specified by O'Brien (i.e. wavelength of 770 nm with glass).

With regards to claim 7, O'Brien does not show the plates separated by air. Official Notice is given that etalons formed of two reflective plates with air in between is well known in the art. At the time

Art Unit: 2877

of the invention, one of ordinary skill in the art would have modified the etalon of O'Brien to be formed by two reflective plates with air in between the reflective plates in order to be able to tune the etalon by varying the spacing of the two reflective plates for observing various wavelengths.

A fact has been relied upon from the personal knowledge of the examiner about which the examiner took Official Notice. Applicant must seasonably challenge well known statements and statements based on personal knowledge when they are made by the Board of Patent Appeals and Interferences. In re Selmi, 156 F.2d 96, 70 USPQ 197 (CCPA 1946); In re Fischer, 125 F.2d 725, 52 USPQ 473 (CCPA 1942). See also In re Boon, 439 F.2d 724, 169 USPQ 231 (CCPA 1971) (a challenge to the taking of judicial notice must contain adequate information or argument to create on its face a reasonable doubt regarding the circumstances justifying the judicial notice). If applicant does not seasonably traverse the well-known statement during examination, then the object of the well known statement is taken to be admitted prior art. In re Chevenard, 139 F.2d 71, 60 USPQ 239 (CCPA 1943). A seasonable challenge constitutes a demand for evidence made as soon as practicable during prosecution. Thus, applicant is charged with rebutting the well-known statement in the next reply after the Office action in which the well known statement was made.

With regards to claims 8 and 18, O'Brien does not expressly show the polarized-collimated beam directing means. O'Brien does suggest that the sloping section should be at the Brewster angle thus suggesting to the skilled artisan that the light polarized light incident on the slope would not create noise and therefore would have provided light that is linearly polarized and would have also collimated the light so that all the light incident on the slope is at the Brewster angle.

Art Unit: 2877

With regards to claims 9, 10, 19, and 20, the surfaces are formed on glass or silicon.

With regards to claim 11, please see the rejection of claim 7 above.

With regards to claim 12, please see the rejection of claim 4 above.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Hwa S. Lee whose telephone number is 571-272-2419. The examiner can normally be reached on Tue-Fr.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory J. Toatley Jr. can be reached on 571-272-2800 ext 77. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Andrew Hwa Lee  
Primary Examiner  
Art Unit 2877